Blue Knob, 49; Eagle's Mere, 48.6; Grampian Hills, 33; Salem Corners, 32.8; Somerset, 30.5; Wellsborough, 29.2; Dyberry and Philipsburgh, 26.5; Le Roy and Quakertown, 26; Wilkes Barre, 24; Bethlehem and Lock Haven, 22; Girardville, 20.3; Blooming Grove and Honesdale, 20; Coopersburgh, Greenville, and Indiana, 19.8; Drifton, 19.5; Mauch Chunk, 19; Meadville and Coudersport, 18; Johnstown, 17.9; Rimersburgh, 17.2; Easton and State College, 16.6; Centre Valley and Pottstown, 16.5; Charlesville, Nisbet, and South Easton, 16; Myerstown, 15.1; Meshoppen and Troy, 15; Annville, 14.6; Emporium, 14.2; Hollidaysburgh, 14; Petersburgh, 13.1; Pleasant Mount, 12.8; New Bloomfield, 12.7; Uniontown, 12.6; Lewisburgh, 12.5; Carlisle and Waynesborough, 12; Coatesville, 11.8; Clarion, 11.7; Cannonsburgh and Greensburgh, 11.4; McConnellsburgh and Tuscarora, 11; West Chester, 10.8; New Castle, 10.6; Tipton, 10.1; Lancaster, 10. *Rhode Island.*—Woonsocket, 26; Kingston *a*, Lousdale, and Providence *a*, 22; Providence *b*, 20; Pawtucket, 19; Bristol, 16; Kingston *b*, 13. *South Carolina.*—Columbia, 7. *South Dakota.*—Canton, 23; Oelrichs, 15.5; Spearfish, 15; Parkston, 14.5; Alexandria, 10.8; Kimball, 10.5; Rapid City, 10.6; Yankton, 10. *Tennessee.*—Clarksville, 6.5. *Texas.*—Fort Elliott and Silver Falls, trace. *Utah.*—Levan, 4. *Vermont.*—Lunenburgh, 33.5; Chelsea, 25; Jacksonville, 24; Hartland, 17; Northfield, 16; East Berkshire and Vernon, 13; Cornwall and Weatherfield Centre, 10. *Virginia.*—Dale Enterprise, 12. *Washington.*—Waterville, 6. *West Virginia.*—Seven Pines, 18; Tannery, 17.5; Oceana, 15.9; Ella, 13.5; Glenville, 11. *Wisconsin.*—Summit Lake, 23.2; Medford, 20; Milwaukee, 15.8; Phillips, 14; Horicon, 12; Delavan, 10.8; Embarrass, 10.5; Chippewa Falls, 10.2; Greenwood, Honey Creek, and Waucousta, 10. *Wyoming.*—Camp Sheridan, 28.8; Fort McKinney, 10.

DEPTH OF SNOW ON GROUND AT CLOSE OF MONTH.

Chart iv shows the depth of snow reported on the ground at the close of the month. In western upper Michigan and the adjoining part of Wisconsin, in west-central Colorado, and east-central Nevada there was a depth of thirty inches, or more; in central New Hampshire and Vermont, northwestern lower Michigan, east-central Missouri and the adjoining part of Illinois, and southeastern Idaho more than ten inches; and in north-central and northwestern Iowa, southwestern South Dakota, and south-central Montana, more than five inches. In the Atlantic coast states snow was reported on the ground as far south as southern Virginia; in the central valleys to southern Kentucky, southern Illinois, and central Kansas; in the Rocky Mountain and plateau regions in north-central New Mexico and central Nevada. No reports of snow on the ground at the close of the month have been received from Pacific coast states. Compared with the preceding month the southern limit of snow on the ground at the close of the respective months was about the same, save over the eastern part of the country, where on February 28th no snow was reported in the Atlantic coast states south of New Hampshire and Vermont, save trace in extreme northeastern Pennsylvania.

HAIL.

Descriptions of the more severe hail storms of the month are given under the head of "Local storms." Hail was reported as follows: 1st, Md., N. J., N. Y., N. C., Oregon, Va. 2d, Oregon. 3d, La. 4th, Ark., Ill., Ohio. 5th, Colo., La., N. J. 6th, N. J., Pa. 7th, Nev., Oregon. 8th, Cal., Nev., Oregon. 9th, Cal., Kans., Mo., Nev., Oregon, S. Dak., Wash. 10th, Ill., Ind. T., N. C., Oregon, Wash. 11th, Tex. 13th, Tex. 14th, Ala., N. Y., N. C., Ohio, Pa., Va. 15th, N. C., Va. 17th, Ohio. 18th, Ark., Ill., Ind., Ky., Mo., N. Y. 19th, Cal., Colo., Ohio, Tenn. 20th, Ariz., Ark., Ill., Mo., Ohio, S. C. 21st, Colo., Ga., La., Mont., N. Y., Tenn., Va. 22d, Ga., Ind., Ky., Md., N. Y., N. C., Ohio, Oregon, S. C., Tenn. 23d, Ga., Oregon, Utah. 25th, Cal., Oregon, Pa., Tenn. 26th, Cal., Idaho, Ill., Mo., Nev., Ohio, Oregon, Tenn., Wash. 27th, Ill., Ind., Iowa, Ky., Mich., Mo., N. Y., Ohio, Tenn. 28th, Ill., Mass., Mich., N. J., N. Y., Ohio, Pa. 29th, Cal., Mo., Oregon, Utah. 30th, Ark., Cal., Colo., Kans., Ky., Mo., Nev., N. J. 31st, Kans., La., Mo., N. J., Tex., Utah.

SLEET.

Sleet was reported as follows: 1st, Conn., D. C., N. J., N. Mex., N. C., Wash. 2d, Mont., N. J., S. C. 3d, Wash. 4th, Pa., Wash. 5th, Kans., Mo., Nebr., Pa., Tenn. 6th, Ark., Colo., Conn., Nebr., N. J., N. Y., Tenn., Tex. 7th, Ala., Colo., Ga., Miss., S. C., Tenn. 8th, Cal., W. Va. 9th, Cal., Ill., Iowa, Mo., S. Dak. 10th, Cal., Colo., Ind., Iowa, Ky., N. C., Ohio, Oregon, Tenn., Wash. 11th, Wis. 14th, Ala., Miss., N. C., Ohio, Pa., Tenn. 15th, N. C. 17th, Va. 19th, Minn., Ohio, Pa. 20th, Minn., Ohio, Wis. 21st, Minn., Mont., Ohio, Wis. 22d, Ala., N. Y., N. C., Pa. 23d, Ill., Wis. 24th, Minn., Mont., Ohio, S. Dak., Wis. 25th, Conn., Iowa, Minn., N. Y., Pa., Wis. 26th, Cal., Iowa, Minn., Ohio. 27th, Colo., Ill., Ind., Iowa, Ky., Nebr., Ohio, Pa., W. Va. 28th, Conn., Ill., Mass., Nebr., N. H., N. Y., Ohio, Pa. 29th, Ill., Ky., Mass., N. Y., Ohio. 30th, Kans., Ky., Mo. 31st, Kans., Mo., Pa., Va., W. Va.

WINDS.

The prevailing winds during March, 1890, are shown on chart ii by arrows flying with the wind. In New England, the upper lake region, and the upper Mississippi valley the winds were mostly from the northwest; in the south Atlantic states from south to west; in the west Gulf states from northeast to southeast; in the Rio Grande Valley from the south; in the Ohio valley and Tennessee, the lower lake region, the southern and middle plateau regions, and the middle Pacific coast from southwest to northwest; in the Missouri Valley from north to northwest; over the middle-eastern slope of the Rocky Mountains from north to east; over the northern plateau region and along the north Pacific coast from southeast to southwest; along the south Pacific coast from west to northwest; in the middle Atlantic states from the northwest, except in the southern part, where south to southwest winds prevailed. In Florida, the east Gulf states, the extreme northwest, and over the northeastern and southeastern slopes of the Rocky Mountains the winds were variable.

HIGH WINDS (in miles per hour).

Maximum velocities of fifty miles, or more, per hour were reported at regular stations of the Signal Service as follows: 2d, 54, n., at Block Island, R. I.; 50, n., at Hatteras, N. C. 7th, 68, se., at Fort Canby, Wash. 8th, 54, se., at Fort Canby, Wash.; 60, sw., at Winnemucca, Nev.; 54, n., at Hatteras, N. C. 9th, 50, s., at Moorhead, Minn. 10th, 54, w., at Fort Stanton, N. Mex. 16th, 50, nw., at Hatteras, N. C. 19th, 60, ne., at Block Island, R. I. 23d, 50, s., at Dodge City, Kans. 24th, 53, nw., at Bismarck, N. Dak.; 60, nw., at Fort Buford, N. Dak. 25th, 66, w., at Chicago, Ill.; 50, nw., at Valentine, Nebr.; 54, nw., at Bismarck, N. Dak. 26th, 60, w., at Pueblo, Colo.; 55, w., at Whipple Barracks, (Prescott) Ariz. 27th, 50, s., at Lexington, Ky.; 50, ne., at Milwaukee, Wis.; 58, w., at Cairo, Ill.; 60, nw., at Springfield, Mo.; 54, nw., at Wichita, Kans.; 60, nw., at Fort Sill, Ind. T.; 68, ne., at Chicago, Ill.; 62, n., at Dodge City, Kans.; 60, w., at Saint Louis, Mo. 28th, 57, ne., at Chicago., Ill.; 58, nw., at Saint Louis, Mo.; 62, nw., at Lexington, Ky.

LOCAL STORMS.

On the 11th a tornado passed over the village of Excelsior, Ark., fifteen miles south of Fort Smith, Ark., demolishing

houses, and injuring several persons. On the 21st a damaging wind and rain storm occurred at Howe, Tex.; 1.75 inch of rain fell in twenty minutes, and considerable damage was done to crops, etc. On the 22d, at about 1.30 p. m., three small tornadoes developed about twenty miles southwest of Thomson, Ga., all of which moved in parallel lines from southwest to northeast, and from one to ten miles apart. In their progress the cone-shaped clouds dipped to the ground in places, then rose and passed on without touching the ground for distances varying from two to six miles. Many houses and much timber were levelled. A storm moving from the southwest struck Concord, N. C., nine miles west of Mount Pleasant, N. C., at about 3 p. m., damaging dwellings and other buildings. A severe storm, which cut a swath about one-fourth of a mile wide through forests and fields, demolishing buildings, levelling heavy standing timber, and killing live stock, was reported in Bertie county, N. C. A violent storm swept over the northern, western, and central parts of South Carolina, and several persons were reported killed by falling houses. The railroad bridge over the Broad River near Spartanburgh was blown from its piers. The storm was very severe in Florence, Spartanburgh, Newberry, Charleston, and Edgefield counties.

On the night of the 27th a remarkable series of tornadoes occurred in Kentucky, southern Indiana, southern Illinois, and southeastern Missouri, in the southeast quadrant of a low pressure storm of great energy, which is described under the heading "Areas of low pressure" as number xi, and within three hundred miles of its centre. While the clearly-defined tornadoes were confined to the sections above referred to, heavy storms prevailed in Colorado, Kansas, Nebraska, and thence eastward over the Ohio Valley and the Lake region, and in Tennessee, but no lives were lost between the Missouri River and the Rocky Mountains. The total loss of life apart from Louisville, Ky., where seventy-six persons were killed, cannot be definitely determined. Reports indicate, however, that in addition to the large number of persons injured, over one hundred lives were lost in Kentucky, and the aggregate valuation of property losses was nearly $4,000,000, of which Louisville sustained about $2,500,000. In Indiana the principal losses were sustained at Jeffersonville, where many buildings were demolished, without, however, an attendant loss of life. In Illinois seven lives are known to have been lost and many persons were injured, and the loss to property is estimated at over $200,000. In Missouri but four lives were reported lost, and the damage to property was not large. The general meteorological conditions at 8 a. m. and 8 p. m. (75th meridian time) of the 27th are shown on charts v and vi, and the paths of the principal low pressure storm, within whose area the tornadoes occurred, and the approximate paths of tornadoes are shown on chart vi.

Sergeant Frank Burke, observer, Signal Corps, has made the following report relative to the tornado which visited Louisville, Ky., and vicinity on the night of March 27, 1890, the observations being taken on 75th meridian time:

March 27th opened with light rains which continued in showers at frequent intervals until 3.40 p. m., with temperature about stationary at 50°, a brisk southeast wind, and rapidly falling barometer. About 7 p. m. the heavy cumulus clouds which covered the sky showed signs of dispersion, diminishing in density and becoming uncertain in their movements, which up to that hour had been a moderately rapid one from the southeast. At 8 p. m. the clouds were heaped into great masses of a grayish yellow color, but this time in the southwest, and with a very rapid motion from that quarter. Simultaneously a heavy bank of what appeared to be ordinary summer thunder clouds, except for their extreme blackness, appeared in the northwest. The bank of clouds gradually extended itself along the western horizon, until at a point near the centre of the southwest quadrant it merged into the cloud masses moving from the southwest. At this time, 8.30 p. m., although the intense darkness precluded a careful observation of their movements, the clouds in the southwest exhibited evidence of a most violent commotion. It appeared as though the northwest and southwest clouds in coming into contact had been shattered to pieces, and their fragments intermingling had been thrown upward and laterally by the force of the shock. The movements described occurred at a considerable elevation, the space intervening between the clouds and the earth being occupied by a misty or fog-like condition. Heavy rain began almost at the moment of the occurrence of the commotion referred to. At the same time the lightning flashes, which had occurred hitherto only at long intervals, increased ten-fold in frequency and intensity, the southwest quarter of the heavens being the centre from which the almost incessant flashes radiated. A peculiar feature of the electrical display was the almost entire absence of thunder. The temperature, which since 5 p. m. had been gradually rising, was now 68°; although this record did not by any means indicate the apparent heat and oppressiveness of the atmosphere. The wind had been blowing a moderate breeze from the southeast during the afternoon; at 8.34 p. m. it shifted suddenly to the southwest and increased in force. At 8.50 p. m. the rain had almost ceased; a few moments later scattering hail-stones fell, the average diameter of which was about one-half inch; then came a momentary lull in the wind, and a peculiar indescribable oppressiveness of the atmosphere. The darkness was intensified at this moment by the sudden diminution of the gas jets, which in many cases were entirely extinguished. It may be important to state in this connection that the jets were not blown out, but failed through lack of pressure in the reservoir.

The approach of the tornado was heralded by a tremendous roaring sound, mingled with the crash of falling buildings. The noise has been likened to that produced by the passage of a heavy train of cars over a bridge, a thousand times intensified. The storm struck the city at 18th street and Broadway, crossed it in an almost due northeasterly direction, and left it at 7th and Water streets. The exact moment it passed the last-named point was 8.57 p. m. This record is verified by the statement of the Western Union officials who noted this as the moment when their wires, which cross the tornado's track, ceased to work. The time occupied by the tornado cloud in passing a given point did not exceed three-fourths of a minute? and, as the average width of its path through the city was about three hundred yards, it advanced at the rate of about 36 to 40 miles an hour. This estimate is approximately verified by noting the stopping time of clocks found at various points in the ruins. The persons who saw the tornado cloud coincide in their statements that it was of a balloon or turnip shape. The darkness and confusion at the time precluded accurate observation of its movements. It was accompanied by a most terrific electrical display, and several reliable persons assert that balls of fire were playing about it. The highest wind-velocity recorded at the Signal Office during the passage of the tornado was thirty-six miles an hour. This is remarkable, considering the fact that its path was less than six hundred yards from the office. After it had passed the wind shifted suddenly to the west and continued to blow from that point during the succeeding twenty-four hours, and with increasing velocity, the record showing forty-two miles an hour at 10 p. m. The sky was perfectly clear at 10.30 p. m., with the exception of a streak of very high and apparently motionless cirrus clouds in the west. Shortly after this time the atmosphere became obscured by a peculiar haze or smoke, through which the moon shone with a reddish light. These conditions were followed by the formation of heavy cumulus clouds in the west, which had a rapid easterly movement and soon covered the entire sky. Immediately after the passage of the tornado the temperature fell suddenly; at midnight it was 48°, and before morning a minimum of 39° was recorded. The path of the tornado has been traced from about eight miles southwest of the city limits on the south bank of the Ohio River to the southern part of Carroll county, a distance of about seventy-five miles. Throughout the entire distance it preserved a nearly uniform width of three hundred yards, although for short spaces contractions to two hundred yards or less, and expansions to more than five hundred yards were noted. Its course was nearly due northeast and the track showed few of the sinuosities common to such storms.

At the point where the tornado entered the city the width of the path of destruction was a little more than two hundred yards. As the tornado cloud progressed the diameter of its path increased, until at the river it had extended sufficiently to embrace the upper part of Jeffersonville on the north bank and the Louisville City Water Works on the south bank, which would indicate a width at that point of over five hundred yards. There is no evidence that the tornado cloud touched the ground at any point in its course through Louisville. This is shown by the fact that in nearly every case the destruction was confined to the upper floors of the demolished buildings, but comparatively few houses being totally ruined, and also by the circumstance that a large proportion of the one story structures in its path were uninjured. Most of the wrecked buildings owed their destruction to the collapsing of their walls from the weight of the débris of the ruined upper floors. Churches, halls, warehouses, and other structures having but little interior support suffered the most. To this fact is attributed the principal loss of life. At the Falls City Hall, alone, where a large number of people had congregated, forty-four persons were killed. Frame buildings invariably withstood the shock much better than those constructed of masonry. But few of the destroyed buildings bear evidence of being actually blown down by the whirl of the tornado cloud itself, but their destruction was apparently caused rather by a lateral or vertical rush of air currents centering toward it. The ruins and the disposition of the débris give ample evidence of this. The right side of the storm track, and in a less marked degree the left side, afforded numerous examples of the intensity of the lateral force referred to. In both cases the sides of the buildings facing the storm were pulled out, the débris falling towards it. In many cases fragile articles, such as glassware, remained undisturbed and uninjured. In the centre of the track the destruction was mainly due to a vertical force which lifted the roofs of the buildings. The Union Depot affords an excellent example of this. This building was nothing more than a well-constructed car shed about two hundred feet long and one hundred feet wide, composed entirely of iron. The roof was lifted bodily and deposited intact on the floor, immediately beneath its original location.

The destroyed buildings were, as a rule, of a very unsubstantial character, being mainly ordinary brick dwellings, small stores, and warehouses. The Fort Nelson Building, at 7th and Main streets, is the most notable exception to the general destruction which marked the path of the tornado. This structure is a well-constructed six-story building, and by its greater height than those surrounding it was more exposed to the storm's fury. Despite the fact that it was directly in the storm's track, and that all other houses on either side were wrecked, it escaped with the loss of its windows. The gyratory motion of the tornado is well illustrated in the disposition of the prostrated trees in the parks and in the timber through which it passed before entering the city. In the centre the trees were piled in promiscuous heaps, denoting a tremendous wrenching or twisting force; on the right side the tree tops point almost northeast; those on the left side, nearer due east. Throughout the path of the storm the zone of destruction on the right side is more than twice as wide as that on the left side, and shows a much greater intensity of force.

The Louisville tornado was but one of a group of such storms which occurred in the state that night. The work of investigating them with a view to determining their location and extent was a peculiarly difficult one. Violent atmospheric disturbances were prevalent throughout Kentucky that night, and many correspondents who were unfamiliar with the characteristics of the tornado proper reported the occurrence of such storms, when in reality they were deceived by unusually severe thunder-storms, accompanied by destructive winds. From the mass of testimony received it has been possible to trace, conclusively, the paths of at least five true tornadoes in Kentucky on the night of March 27th. Each of these storms resulted in loss of life and great destruction of property. In Louisville seventy-six persons were killed, two hundred injured, and $2,500,000 worth of property destroyed. Outside of the city, including Jeffersonville, Ind., thirty persons were killed, fifty injured, and $1,000,000 worth of property destroyed. That many lives and an immense amount of property on the river were not lost was due entirely to warnings sent out from the Signal Office on the morning of the 27th. Steamboats, coal fleets, and other craft lying in the harbor were secured by double moorings and were thereby enabled to withstand the force of the storm. River men estimate the value of property thus saved at about $100,000."

Tornadoes were also reported on this date as follows:

A tornado passed northeastward over the southwest part of Webster county, Ky., its path being about thirty-two miles long and one-fourth to three-fourths of a mile wide. Fifteen persons were killed; sixty dwellings and a large number of outhouses destroyed; and property damaged to the extent of about $200,000. Within a radius of seven miles of Kuttawa, Lyon Co., Ky., four persons were killed; a number injured; and $15,000 damage done to property. At Bremen, Muhlenberg Co., Ky., several persons were injured; eight houses were swept away and a large number wrecked or unroofed; and the damage to property was about $20,000. A report from Marion, Crittenden Co., Ky., states that in that county three persons were killed and eighty injured, and that the loss to property amounted to about $75,000. At Eddyville, Lyon Co., Ky., two persons were killed, and the loss by damage to property was about $12,000. Considerable loss of life and destruction of property was also reported in Christian, Laurel, Henry, Trigg, Barren, and Henderson counties, Ky. At Metropolis, Massac Co., Ill., one person was killed; about fifty injured; and the damage to property aggregated about $150,000. At Poplar Ridge, near Murphysborough, Jackson Co., Ill., two persons were killed, and the loss to property was about $3,000. At Grand Tower, Jackson Co., Ill., four persons were killed; about sixty injured; and $40,000 to $50,000 worth of property was destroyed. A tornado passed northeastward over Olney, Richland Co., Ill., injuring five persons, wrecking thirty-two houses, many stables, and damaging property to the extent of nearly $50,000. A destructive tornado was reported in the lower part of Pope county, Ill., and a well-defined tornado was reported in Clay county, Ill. Heavy wind storms, generally attended with hail of unusual size, passed over Winnebago, Washington, Union, Randolph, Cook, and Alexander counties, Illinois. Furious storms prevailed over southern Indiana. A tornado passed over the southeastern part of Missouri, killing four persons at Hoff's Station, and injuring several others. In Tennessee the storm was very severe in the western and the northern and southern parts of the middle section of the state. The counties of Sumner and Lincoln seem to have suffered most. In the former several lives and an immense amount of property were lost, and in the latter it was particularly severe in and around the town of Fayetteville, where many buildings were demolished and several lives were lost. In other portions of the state much damage was done to buildings, etc.

INLAND NAVIGATION.

FLOODS.

Excessive rainfall over a great part of the vast water-shed between the Alleghany and Rocky Mountains for the first three months of 1890 furnished a surplus of water that the outlets of the lower Mississippi valley could not discharge, and caused one of the greatest floods on record along the lower Mississippi river. At most important points the water was the highest known, but the levees were in better condition than during great floods of preceding years, and many of the more important levees were firm and in good condition at the close of the month. From January to March, 1890, inclusive, the precipitation in the Ohio Valley and Tennessee was about one-half greater, and in the upper Mississippi valley and the west Gulf states about one-fourth greater than the average precipitation in those regions for the months named. In other sections drained by the Mississippi River and its tributaries the precipitation for the period referred to was deficient. The levee system for the protection of land lying along the lower Mississippi river was commenced with the founding of New Orleans, and this work has been carried on as the necessity for protecting the fertile and rapidly improving sections of the lower Mississippi valley from inundation became apparent, and in 1850, by the concentration of national and state resources, the gigantic work of leveeing the Mississippi River northward to southern Missouri was systematically begun. The inadequacy of this great system to afford complete protection during extreme flood conditions was demonstrated during 1858 and 1859, when the water was above the danger-line during one hundred and fifty-nine days, and thirty-two crevasses occurred from the mouth of the Saint Francis River to Bonnet Carre, La. Other great floods during which levees were broken and considerable sections of country were inundated occurred in the lower Mississippi in 1862, 1874, 1882, and 1884, the overflowed area in 1882 being about thirty thousand square miles.

The following is a list of the crevasses which occurred in the lower Mississippi levees during March, 1890, with the rise and fall and the stage of water at the more important points from which reports have been received:

On the 1st the stage of water at Cincinnati, Ohio, was 57 feet, and the river had risen 15 feet in five days; at Cairo, Ill., the stage of water was 42.2 feet, and the river had risen 8 feet in five days; at Chattanooga, Tenn., the stage of the water was 40 feet, and it had risen 30 feet in five days; at Nashville, Tenn., the stage of water was 47 feet, and it had risen 34 feet in six days; at Saint Louis, Mo., the stage of water was 8.5 feet, and it had been stationary; at Vicksburg, Miss., the stage of the water was 46.3 feet, and at Little Rock, Ark., 19 feet. The gauge reading at New Orleans, La., was 15.5 feet on the 1st and 2d. On the 4th the river reached the danger-line, 34 feet, at Memphis, Tenn. On the 9th a crevasse occurred in Sappington Hook levee, which is situated in Desha Co., Ark., about six miles above Arkansas City. Adjacent plantations were flooded but no loss of life occurred. At the close of the month this crevasse was about six hundred feet wide. The levee at Alsatia, La., about thirty-eight miles above Vicksburg, Miss., also broke. The stage of the water at Vicksburg on this date was 46.9 feet and rising; at Helena, Ark., 43.3 feet and rising. On the 11th the gauge reading at New Orleans, La., was 16.2, the high-water mark of 1874. On the 12th an extensive break occurred in the main levee at Alsatia, La. On